(c) During the period, over 540 technologies have been licensed, including 150 licensed for the first time.

(d) CSIR has a two-tier system of project formulation and selection. At the laboratory level, there is Research Council chaired by an eminent external scientist/technologist, which comprises experts from academic, industry and government agencies/ departments. It advises on the formulation, selection and monitoring of research projects keeping in view national priorities and the potential opportunity areas. At the headquarter level all research projects from the laboratories are prioritized and taken up on the basis of zero based budgeting.

Cyclone forecasting

1471. SHRIMATI PREMA CARIAPPA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether there is any mechanism to forecast cyclones in advance;

(b) if so, the details thereof and the number of days in advance cyclone forecasting is being done presently;

(c) whether Government have taken any steps to improve the accuracy of cyclone forecasts; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT): (a) Yes, Madam.

(b) to (d) The India Meteorological Department (IMD) follows a four-stage warning system for tropical cyclone. A "Pre-cyclone Watch" is issued whenever a depression forms over the Bay of Bengal or Arabian Sea. This is followed by a "Cyclone Alert" issued 2-3 days in advance. In the third stage, Cyclone Warnings are issued 1-2 days in advance which specify the expected place and time of landfall of the tropical cyclone. The final stage is known as "Post-landfall Outlook" which is issued 12 hours in advance of landfall.

The accuracy of cyclone forecasts issued by IMD is generally on par with the accuracy of such forecasts issued by the tropical cyclone forecast services of other countries. However, with the

development of new observing systems such as buoys, Doppler Weather Radars and new generation satellites, these forecasts will improve further.

Establishment of National Institute of Environment, Health and Sciences

†1472. SHRI ABU ASIM AZMI: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government have suggested to establish National Institute of Environment, Health and Sciences and its regional institute all over India, keeping in view the ill effect of air pollution, water pollution and hospital wastes on health; and

(b) if so, the framework of such institutions and the annual expenditure to be incurred on them?

THE MINISTER OF STATE IN THE DEPARTMENT OF SCIENCE AND TECHNOLOGY IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT): (a) No, Sir.

(b) Does not arise.

Setting up steel and Alumina Plants in Orissa

1473. MS. PRAMILA BOHIDAR: Will the Minister of STEEL be pleased to state:

(a) whether 19 companies have submitted their proposals to set up steel and alumina plants in Orissa; and

(b) if so, the status of all proposals and reactions of Government thereto?

THE MINISTER OF STATE OF THE MINISTRY OF STEEL (SHRI BRAJ KISHORE TRIPATHY): (a) and (b) No prior permission is required for setting up steel and alumina plants barring certain locational restrictions. Entrepreneurs are free to set up these plants based on their commercial judgement. As per the information received from State Govt. of Orissa only 14 companies have submitted their

†Original notice of the question was received in Hindi.